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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,105	03/26/2004	Craig B. Green	66638/46008	8035

7590  
09/20/2005  
Robert L. Villhard  
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St. Louis, MO 63101

EXAMINER
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HUNNINGS, TRAVIS R

ART UNIT	PAPER NUMBER
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2632

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/810,105

Applicant(s)

GREEN, CRAIG B.

Examiner

Travis R. Hunnings

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. Regarding claims 13, 14 and 21, the word "about" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

### ***Claim Objections***

2. Claim 15 is objected to because of the following informalities: the limitation 'a lubricant' is listed twice. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 7, 9-17 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hausladen et al. (Hausladen; Canadian Patent Publication 2,345,883).

Regarding claim 1, the claimed method of introducing at least one radio frequency identification tag into a liquid being able to retain the tag when the liquid is applied to a surface is met by the RFID being used in applications involving high temperature and aggressive liquid resistance such as automobile painting applications (page 4, lines 1-2). It would have been obvious to one of ordinary skill in the art that the RFID tag of Hausladen would be able to withstand liquid environments such as automobile painting and therefore using the RFID as a part of the automobile paint mixture.

Regarding claim 2, the method further comprising applying the liquid to coat the surface is met by the RFID being used for automobile painting applications (page 4, lines 1-2).

Regarding claim 3, it is obvious that the RFID tag is energized in order to operate.

Regarding claim 4, it is obvious that the RFID is read to identify the product with which it is attached.

Regarding claim 7, examiner takes official notice that it is well known in the art that RFID tags are used to identify the products with which they are attached and therefore it would have been obvious to one of ordinary skill in the art to use the RFID

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that is placed in a liquid, such as automobile paint, to identify the liquid that it is placed into.

Regarding claim 9, it would have been obvious to choose a liquid that allowed the RFID tag communicate when the tag was placed into the liquid, otherwise it would defeat the purpose of the RFID tag to use it in a liquid that caused it not to operate properly.

Regarding claim 10, the claim is interpreted and rejected as claim 9 stated above.

Regarding claim 11, the claimed method further comprising using the liquid with the tag in it in a liquid process is met by the RFID being used in automobile painting applications (page 4, lines 1-2).

Regarding claim 12, the claim is interpreted and rejected as claim 1 stated above. The claimed 'plurality of radio frequency identification tags' would have been obvious because the user can put any number of RFID tags into the automobile paint for the desired size of the application.

Examiner also notes that claim 12 is rejected as being a non-interactive combination of two well known products, an RFID tag and a liquid. The parts of the mixture do not change the other respective part when combined in the mixture. The

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RFID does not alter the properties of the liquid when combined and the liquid does not alter the properties of the RFID when combined.

Regarding claim 13, it is well known that tags come in varied sizes and the user can utilize a tag of any size desired.

Regarding claim 14, the claim is interpreted and rejected as claim 13 stated above.

Regarding claim 15, the claimed liquid being at least one of a coating, a paint, a varnish, a corrosion inhibitor, a sealant, an adhesive, a lubricant, a fuel, a hydraulic fluid, a putty, a caulk, and a solvent is met by the automobile paint (page 4, lines 1-2).

Regarding claim 16, the claimed tags being neutrally buoyant in the liquid is met by the RFID tags being very light in comparison to automobile paint.

Regarding claim 17, the claimed liquid being a two-part mixture is met by the liquid being automobile paint that the user can select any kind of paint, including two-part mixture paint.

Regarding claim 20, the claim is interpreted and rejected as claim 9 stated above.

Regarding claim 21, the claimed liquid having a viscosity of 100,000,000 centipoise or less is met by the automobile paint which has a viscosity of much less than that.

Regarding claim 22, the claimed surface is met by the surface of the automobile used for the automobile painting application (page 4, lines 1-2);

The claimed coating on the surface is met by the paint applied to the surface (page 4, lines 1-2);

The claimed at least one radio frequency identification tag in the coating, the coating being able to retain the tag when the coating is in a liquid and when the coating is applied to the surface is met by the RFID being used in applications involving high temperature and aggressive liquid resistance such as automobile painting applications (page 4, lines 1-2). It would have been obvious to one of ordinary skill in the art that the RFID tag of Hausladen would be able to withstand liquid environments such as automobile painting and therefore using the RFID as a part of the automobile paint mixture.

Regarding claim 23, the claimed body formed from a liquid that sets is met by the body formed by the paint applied to the automobile surface drying (page 4, lines 1-2);

The claimed at least one radio frequency identification tag in the body, the liquid being able to retain the tag at least until the liquid sets is met by the RFID being used in

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applications involving high temperature and aggressive liquid resistance such as automobile painting applications (page 4, lines 1-2). It would have been obvious to one of ordinary skill in the art that the RFID tag of Hausladen would be able to withstand liquid environments such as automobile painting and therefore using the RFID as a part of the automobile paint mixture.

Regarding claim 24, the claimed granular solid containing a plurality of radio frequency identification tags in the granular solid, whereby the tags identify the mixture is met by the RFID being used in applications involving high temperature and aggressive liquid resistance such as automobile painting applications (page 4, lines 1-2). It would have been obvious to one of ordinary skill in the art that the RFID tag of Hausladen would be able to withstand liquid environments such as granular solids. Examiner takes official notice that it is well known in the art that RFID tags are used to identify the products with which they are attached and therefore it would have been obvious to one of ordinary skill in the art to use the RFID that is placed in a granular solid to identify the granular solid that it is placed into.

Examiner also notes that claim 24 is rejected as being a non-interactive combination of two well known products, an RFID tag and a granular solid. The parts of the mixture do not change the other respective part when combined in the mixture. The RFID does not alter the properties of the granular solid when combined and the granular solid does not alter the properties of the RFID when combined.

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5. Claims 5, 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hausladen in view of Moscaritolo (US Patent 6,736,989).

Regarding claim 5, Hausladen discloses all of the claimed limitations except for the claimed method comprising introducing at least one MEMS sensor into the liquid. Moscaritolo discloses a MEMS sensor that is placed into a liquid and read in order to measure various attributes of the liquid (abstract). Adding a MEMS sensor to the automobile paint would allow the user to monitor the liquid. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Hausladen according to the teachings of Moscaritolo to include a MEMS sensor to be able to read the sensor and monitor the status of the liquid.

Regarding claims 6 and 18, the claims are interpreted and rejected as claim 6 stated above. The claimed 'plurality of MEMS sensors' as claimed in claim 18 would have been obvious to one of ordinary skill in the art based on the size of the liquid and the desired application.

6. Claims 8 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Hausladen in view of applicant's admitted prior art (AAPA).

Regarding claim 8, Hausladen discloses all of the claimed limitations except for the claimed method further comprising interrogating the tag to determine the information

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that an adjacent tag has communicated to the tag. However, as admitted by AAPA (specification, page 7) it is well known in the art for multiple tags to communicate to one another, therefore it would have been obvious to one of ordinary skill in the art to interrogating the tag to determine the information that an adjacent tag has communicated to the tag.

Regarding claim 19, the claim is interpreted and rejected as claim 8 stated above.

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smith et al. *RFID Or EAS Label Mount With Double Sided Tape*, US Patent 6,281,795;

Monico, *Low Cost Long Distance RFID Reading*, US Patent 6,259,369;

Rasband, *EAS Ready Paperboard*, US Patent 6,275,156;


Vega et al. *Radio Frequency Identification Tag Apparatus And Related Method*, US Patent 6,265,977.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRH

  
DANIEL WU  
SUPERVISORY PATENT EXAMINER  
9/19/05